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(54) CHANNEL MANAGEMENT TECHNIQUE FOR ASYMMETRIC DATA SERVICES

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(57) ABSTRACT

A narrowband communication system provides wideband data services in a secondary service band. This limits the impact on primary services in peak traffic regions in that the primary service band is not required to download wideband data from a communication node (e.g., a satellite) to a mobile terminal. The narrowband communication system implements a handoff protocol (400) that rate negotiates a channel bandwidth of an active connection (404) to the amount of channels that are available in a new cell. The narrowband communication system preempts (414) lower priority subscribers when a higher priority (408) high-speed data terminal requires access to the system and a requested channel assignment is not available (412). The complexity of a high-speed data terminal communication chipset is reduced by a receiver design that minimizes the range of frequencies that are required to be demodulated.

26 Claims, 4 Drawing Sheets

